

Curriculum structure semester wise

ELECTRICAL ENGINEERING

SEMESTER-I

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory			L	T	P	TA	CT	TOT	ESE	Sub Total		
1	HU 1101	Professional communication in English	3	1	0	20	10	30	70	100	4	4
2	CH 1101	Engineering Chemistry-I	3	1	0	20	10	30	70	100	4	4
3	PH 1101	Engineering Physics-I	3	1	0	20	10	30	70	100	4	4
4	MA 1101	Mathematics-I	3	1	0	20	10	30	70	100	4	4
5	ME 1101	Engineering Mechanics	3	1	0	20	10	30	70	100	4	4
6	EE 1101	Basic Electrical Engineering	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
Sessionals												
1	CH 1201 PH 1201	Chemistry Lab / Physics Lab	0	0	3	30	-	30	20	50	2 (1+1)	3
2	ME 1201 EE 1201	Engineering Mechanics Lab/ Electrical Engineering Lab	0	0	3	30	-	30	20	50	2 (1+1)	3
3	ME 1202	Engineering Graphics-I	0	0	3	30	-	30	20	50	2	3
4	ME 1203	Work Shop Practice-I	0	0	3	30	-	30	20	50	2	3
5	EE 1301	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33

Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

SEMESTER-II

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory			L	T	P	TA	CT	TOT	ESE	Sub Total		
1	IT 2101	Programming language (C++)	3	1	0	20	10	30	70	100	4	4
2	CH 2102	Environment and ecology	3	1	0	20	10	30	70	100	4	4
3	PH 2102	Engineering Physics-II	3	1	0	20	10	30	70	100	4	4
4	MA 2102	Mathematics-II	3	1	0	20	10	30	70	100	4	4
5	ME 2102	Engineering Thermodynamics	3	1	0	20	10	30	70	100	4	4
6	EC 2101	Basic Electronics	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
Sessionals												
1	EC 2201	Basic Electronics Lab	0	0	3	30	-	30	20	50	2	3
2	IT 2201	Computer Programming Lab	0	0	3	30	-	30	20	50	2	3
3	ME 2204	Engineering Graphics-II	0	0	3	30	-	30	20	50	2	3
4	ME 2205	Work Shop Practice-II	0	0	3	30	-	30	20	50	2	3
5	ME 2302	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33 Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

SEMESTER-III

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1	MA 3103	Numerical analysis & Programming	3	1	0	20	10	30	70	100	4	4
2	PH 3103	Material Science (B)	3	1	0	20	10	30	70	100	4	4
3	MA 3104	Mathematics-III	3	1	0	20	10	30	70	100	4	4
4	EE 3102	Electrical Machine I	3	1	0	20	10	30	70	100	4	4
5	EE 3103	Network Theory	3	1	0	20	10	30	70	100	4	4
6	EC 3102	Digital Electronics & Integrated Circuits	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
Sessionals												
1	MA 3201	Numerical Analysis & Programming Lab	0	0	3	30	-	30	20	50	2	3
2	EE 3202	Electrical Machine Lab	0	0	3	30	-	30	20	50	2	3
3	EE 3203	Network Theory Lab	0	0	3	30	-	30	20	50	2	3
4	EC 3202	Digital Electronics Lab	0	0	3	30	-	30	20	50	2	3
5	EE 3303	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33 Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

SEMESTER-IV

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1	MA 4105	Mathematics-IV	3	1	0	20	10	30	70	100	4	4
2	MA 4106	Probability & Statistics	3	1	0	20	10	30	70	100	4	4
3	EC 4103	Analog Electronics	3	1	0	20	10	30	70	100	4	4
4	EE 4104	Power System I	3	1	0	20	10	30	70	100	4	4
5	EE 4105	Instrumentation I	3	1	0	20	10	30	70	100	4	4
6	EE 4106	Signals and Systems	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
Sessionals												
1	EE 4204	Computational Lab	0	0	3	30	-	30	20	50	2	3
2	HU 4201	Communications Skill Lab	0	0	3	30	-	30	20	50	2	3
3	EE 4205	Instrumentation Lab	0	0	3	30	-	30	20	50	2	3
4	EC 4203	Analog Electronics Lab	0	0	3	30	-	30	20	50	2	3
5	EE 4304	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33 Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

SEMESTER-V

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory			L	T	P	TA	CT	TOT	ESE	Sub Total		
1	EE 5109	Microprocessor & Interfacing	3	1	0	20	10	30	70	100	4	4
2	EE 5110	Power System II	3	1	0	20	10	30	70	100	4	4
3	EE 5111	Instrumentation II	3	1	0	20	10	30	70	100	4	4
4	EE 5112	Electrical Machine II	3	1	0	20	10	30	70	100	4	4
5	PH 5104	EMF	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	EE 5208	Microprocessor Lab	0	0	3	30	-	30	20	50	2	3
2	EE 5209	Electrical Workshop	0	0	3	30	-	30	20	50	2	3
3	EE 5210	Instrumentation-II Lab	0	0	3	30	-	30	20	50	2	3
4	EE 5211	Electrical Machine-II Lab	0	0	3	30	-	30	20	50	2	3
5	EE 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

SEMESTER-VI

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory			L	T	P	TA	CT	TOT	ESE	Sub Total		
1	EE 6114	Management Concept & Techniques	3	1	0	20	10	30	70	100	4	4
2	EE 6115	Microprocessor & Microcontroller	3	1	0	20	10	30	70	100	4	4
3	EE 6116	Control System I	3	1	0	20	10	30	70	100	4	4
4	EE 6117	Protection of Power Apparatus & System	3	1	0	20	10	30	70	100	4	4
5	EE 6118	Power Electronics	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	EE 6213	Power Electronics Lab	0	0	3	30	-	30	20	50	2	3
2	EE 6214	Microcontroller Lab	0	0	3	30	-	30	20	50	2	3
3	EE 6215	Control System Lab	0	0	3	30	-	30	20	50	2	3
4	EE 6216	PPAS Lab	0	0	3	30	-	30	20	50	2	3
5	EE 6306	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

SEMESTER-VII

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory			L	T	P	TA	CT	TOT	ESE	Sub Total		
1		Elective-I	3	1	0	20	10	30	70	100	4	4
2		Elective-II	3	1	0	20	10	30	70	100	4	4
3	EE 7119	Control System -II	3	1	0	20	10	30	70	100	4	4
4	EE 7120	Computer Aided Power System	3	1	0	20	10	30	70	100	4	4
5	EE 7121	Modelling & Simulation	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	EE 7217	Tour, Training & Colloquium	0	0	3	30	-	30	20	50	2	3
2	EE 7218	Simulation Lab	0	0	3	30	-	30	20	50	2	3
3	EE 7219	PSCAD Lab	0	0	3	30	-	30	20	50	2	3
4	EE 7220	Project part-I	0	0	3	30	-	30	20	50	2	3
5	EE 7307	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

ELECTIVES I & II

DIGITAL SIGNAL PROCESSING (EE 7122)

NEURAL NETWORKS (EE 7124)

CAD OF ELECTRICAL MACHINE (EE 7126)

NON-CONVENTIONAL ENERGY (EE 7128)

PROCESS CONTROL & INSTRUMENTATION (EE 7130)

VIRTUAL INSTRUMENTATION (EE 7132)

COMPUTER NETWORKS (IT 6103)

ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEM (EE 7123)

MACHINES AND DRIVES DYNAMICS (EE 7125)

OBJECT ORIENTED PROGRAMMING LANGUAGE (EE 7127)

MANAGEMENT INFORMATION SYSTEM (EE 7129)

MATLAB APPLICATION (EE 7131)

MANAGERIAL ACCOUNTING AND FINANCIAL MANAGERMENTS (EE 7133)

DATA STRUCTURE (CS 3101)

SEMESTER-VIII

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory			L	T	P	TA	CT	TOT	ESE	Sub Total		
1		Elective-III	3	1	0	20	10	30	70	100	4	4
2		Elective-IV	3	1	0	20	10	30	70	100	4	4
3		Elective-V	3	1	0	20	10	30	70	100	4	4
4	EE 8134	Drives & Control	3	1	0	20	10	30	70	100	4	4
5	EE 8135	Intelligent Control	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	EE 8221	Project part-II	0	0	12	-	-	120	80	200	8	12
2	EE 8308	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

ELECTIVES III, IV & V

DSP BASED CONTROL OF ELECTRIC DRIVE (EE 8136)

POWER QUALITY & RELIABILITY (EE 8138)

HIGH VOLTAGE ENGINE RING (EE 8140)

POWER ELECTRONICS APPLICATIONS IN POWER SYSTEM (EE 8142)

POWER SYSTEM DYNAMICS AND CONTROL (EE 8144)

HVDC TRANSMISSION (EE 8146)

MODELING AND ANALYSIS OF ELECTRICAL MACHINES (EE 8148)

NEURAL NETWORKS & FUZZY SYSTEM (EE 8150)

EMBEDDED SYSTEM DESIGN (EE 8151)

UTILIZATION AND TRACTION (EE 8137)

MECHATRONICS (EE 8139)

INTELLIGENT INSTRUMENTATION (EE 8141)

IDENTIFICATION TECHNIQUES AND ADAPTIVE CONTROL (EE 8143)

COMPUTER ORGANISATION & ARCHITECTURE (EE 8145)

INTELLIGENT ALGORITHMS FOR POWER SYSTEMS (EE 8147)

BIOMEDICAL INSTRUMENTATION (EE 8149)

VLSI DESIGN (EC 7111)

COMPUTER VISION (CS 7118)